

Abstract

An injection lance to stir, trim and rinse a molten metal, such as liquid steel. A gas, or a gas and one or more powdered/granular metallurgical agents, may be introduced into the molten metal through the injection lance. The injection lance includes a plurality of interconnecting components. The components include at least one body section and one end section. Each section includes a center pipe and a refractory shell surrounding the center pipe. The body section(s) and end section provide a conduit for the gas or gas plus powdered/granular metallurgical agents. In a preferred embodiment, at least a portion of one of the refractory shells is made of a refractory composition that is isopressed around the center pipe.